

Title (en)
SINTERED ALLOY AND METHOD FOR PRODUCING SAME

Title (de)
SINTERLEGIERUNG UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
ALLIAGE FRITTÉ ET PROCÉDÉ DE PRODUCTION

Publication
EP 3822379 A4 20210825 (EN)

Application
EP 19834991 A 20190710

Priority

- JP 2018131364 A 20180711
- JP 2019027344 W 20190710

Abstract (en)
[origin: EP3822379A1] Provided is a sintered alloy, including, by mass, 13.86 to 27.72 % of Cr; 6.47 to 20.33 % of Ni; 0.85 to 11.05 % of Cu; 0.46 to 2.77 % of Si; 0.15 to 1.95 % of P; 0.2 to 1.0 % of C; and a remainder of Fe and an unavoidable elements as an overall composition; having a density of 6.8 to 7.4 Mg/m³; and having a metal structure containing an iron alloy matrix with a pore dispersed within the iron alloy matrix and a carbide dispersed in the iron alloy matrix, the iron alloy matrix having crystal grains with an average crystal particle size of 10 to 50 μm.

IPC 8 full level
C22C 33/02 (2006.01); **B22F 3/10** (2006.01); **B22F 3/11** (2006.01); **C22C 9/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01)

CPC (source: EP US)
B22F 3/1103 (2013.01 - EP); **C22C 9/00** (2013.01 - EP); **C22C 33/0285** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/40** (2013.01 - EP); **C22C 38/42** (2013.01 - EP); **C22C 38/44** (2013.01 - EP); **C22C 38/50** (2013.01 - EP); **B22F 2998/10** (2013.01 - EP); **B22F 2999/00** (2013.01 - EP)

Citation (search report)

- [A] EP 2772558 A2 20140903 - HITACHI CHEMICAL CO LTD [JP]
- [A] EP 2511031 A1 20121017 - HOEGANAES AB PUBL [SE]
- [A] WO 2013059104 A1 20130425 - BORGWARNER INC [US]
- See references of WO 2020013227A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3822379 A1 20210519; EP 3822379 A4 20210825; EP 3822379 B1 20220706; CN 112368409 A 20210212; CN 112368409 B 20220726; JP 7248027 B2 20230329; JP WO2020013227 A1 20210802; WO 2020013227 A1 20200116

DOCDB simple family (application)
EP 19834991 A 20190710; CN 201980045440 A 20190710; JP 2019027344 W 20190710; JP 2020530226 A 20190710